

REMARKS

In the Office Action dated December 20, 2002, claims 1-6, 9-22, 30, 31, and 34 were rejected under 35 U.S.C. § 103 over U.S. Patent No. 6,067,542 (Carino) in view of U.S. Patent No. 6,434,545 (MacLeod); claims 23-29 were rejected under § 103 over Carino in view of U.S. Patent No. 5,943,666 (Kleewein); and claims 7, 8, 32, and 33 were rejected under § 103 over Carino in view of MacLeod and further in view of Kleewein.

With respect to claim 1, it is respectfully submitted that the asserted combination of Carino and MacLeod (even if proper) does not teach or suggest the following elements of claim 1: displaying the steps of a query execution plan for a parallel database system in a graphical user interface, and depicting parallel execution of steps of the query execution plan in the graphical user interface, where depicting the parallel execution of steps comprises displaying plural elements corresponding to concurrently executing plural steps on respective processors of the parallel database system.

As conceded by the Office Action, Carino does not disclose the displaying and depicting acts of claim 1. Reliance was made instead on MacLeod, especially Figures 5 and 6 of MacLeod. Note that Figure 5 of MacLeod displays two different query plans for two different queries, not parallel execution of steps of *the* query execution plan. Also, to further clarify the present invention as recited in claim 1, Applicant has added language into claim 1 reciting that depicting the parallel execution of steps comprises displaying plural elements corresponding to concurrently executing plural steps on respective processors of the parallel database system. The icons displayed in Figures 5 and 6 of MacLeod clearly do not correspond to *concurrently executing plural steps on respective processors of a parallel database system*.

Therefore, even if Carino and MacLeod can be properly combined (which they cannot), the combined teachings of Carino and MacLeod do not disclose or suggest the elements as recited in claim 1.

Moreover, there is no suggestion or motivation to combine Carino and MacLeod. Although Carino describes a parallel database system in which query plans can be selected by an optimizer for execution, there is no suggestion anywhere within Carino of the need for displaying steps of the generated query execution plans in a graphical user

interface, as recited in claim 1. Although MacLeod discloses display of query plans, it does not suggest that the displayed query plans correspond to parallel execution of steps on respective processors of a parallel database system. In other words, there is no suggestion, whether explicit or implicit, within Carino and MacLeod to suggest combining their respective teachings. The only suggestion of displaying parallel execution of steps of a query execution plan is found in the present application. Therefore, the combination of teachings of Carino and MacLeod performed in the Office Action is based entirely on impermissible hindsight, as the Office Action is unable to point to any explicit or implicit suggestion within Carino or MacLeod that would combine the references as proposed by the Office Action.

In view of the foregoing, the *prima facie* obviousness rejection of claim 1 is defective on at least two grounds: (1) even if combined, Carino and MacLeod do not teach or suggest the claimed invention; and (2) there simply is no motivation or suggestion to combine the teachings of Carino and MacLeod. Therefore, withdrawal of the obviousness rejection is respectfully requested.

The obviousness rejection of independent claim 30 is defective for similar reasons.

Independent claim 11 was also rejected over the asserted combination of Carino and MacLeod. Applicant respectfully traverses the rejection, as the combination of Carino and MacLeod does not teach determining a first execution plan of *the query* under a first condition and determining a second execution plan of *the query* under a second condition, along with displaying the first and second execution plans (both for *the query*) concurrently to enable comparison of the execution plans. Figure 5 of MacLeod shows the graphical analysis of *two specified queries*, not one query. MacLeod, 7:13-16. Figure 6 of MacLeod shows the graphical analysis of one execution for one specified query--there is no display of multiple execution plans for *the query*. Therefore, even if Carino and MacLeod can be properly combined, the combination does not teach or suggest the elements of claim 11.

Independent claim 23 was rejected over the asserted combination of Carino and Kleewein. As conceded in the Office Action, Carino does not disclose a controller to determine an execution plan of a query based on emulation data that emulates an

environment of a target system in which a parallel database system is implemented. The Office Action cited to Kleewein as teaching this element.

The Office Action pointed to element 506 in Figure 5, and the accompanying text, of Carino as disclosing the controller to display a representation of an execution plan in a graphical user interface. Applicant respectfully disagrees. Element 506 of Figure 5 shows a video object server API. A review of the description accompanying Figure 5 does not indicate that the video object server API 506 displays a representation of an execution plan in a graphical user interface. Kleewein similarly does not disclose or suggest displaying a representation of an execution plan in a graphical user interface. Therefore, even if Carino and Kleewein can be properly combined, the combination does not teach or suggest the above indicated element of claim 23.

Further, the asserted combination of Carino and Kleewein does not disclose a controller to determine an execution plan of a query based on emulation data that emulates an environment of a target system *in which a parallel database system is implemented*. In Kleewein, a query optimizer procedure 36 emulates an optimization procedure carried out by a remote database, with the emulation enabled by a catalog 38 that stores lists of methods supplied by the connected remote database. Kleewein, 4:54-67. There is no indication whatsoever that the catalog 38 stores emulation data relating to a parallel database system.

Therefore, claim 23 is allowable over the asserted combination of Carino and Kleewein.

In view of the foregoing, all claims are in condition for allowance, which action is respectfully requested. The Commissioner is authorized to charge any additional fees, including extension of time fees, and/or credit any overpayment to Deposit Account No. 50-1673 (9020).

Respectfully submitted,

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